

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 6928**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002020**Date Inspected:** 22-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yi Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 89 Meter Mock-Up**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

This QA Inspector witnessed the in process Shielded Metal Arc (SMAW) welding of the 89 Meter Mock-Up and performed random verification.

The ZPMC Certified Welding Inspector (CWI) Sha Zhu informed the QA Inspector the approved welding procedure specification WPS-B-T-3211-TC-U5b-1 was being followed to perform the welding. This QA Inspector witnessed Weld Joint (WJ) MUSB-MA21 F/J 11A piece mark p193-4 and Subassembly SA24 being welded by ZPMC qualified welder, Wang Zhong Hua #053753. The ZPMC qualified welder Dai Lu #048659 was welding P193-3 to SA24-3. Both welders were performing welding in the Flat (1G) position.

The welding electrodes utilized were Excalibur 4.8 mm diameters TL 508 9018M H4R that were kept in a hot rod oven box.

The welding parameters were recorded by this QA Inspector and documented as follows: welding amperage 286 amps, welding voltage 23.2 volts with a travel speed of 170 millimeters per minute.

The welding and work in progress on the items listed above appeared to comply with the WPS and the contract documents. See photograph below to provide additional detail.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

As noted above and basic communication between QC Inspector and QA inspector when and where welding inspections are to be performed.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dixon,Roscoe	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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